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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/107,230	06/30/1998	SANJAY AIYAGARI	CISCP047	7733

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BEYER WEAVER & THOMAS LLP
P.O. BOX 778
BERKELEY, CA 94704-0778

EXAMINER

TRINH, DUNG N

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 03/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/107,230	AIYAGARI ET AL.	
	Examiner	Art Unit	
	D. Trinh	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 January 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 and 19-22 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-16 and 19-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Objections

2. In claim 21, line 5, it appears that "one additional fields" should have been "one additional field". Correction is required.

Claim Rejections - 35 USC § 101

3. Claims 21 and 22 are rejected under 35 U.S.C. 101 because the claimed invention is non-statutory. The claimed data frame performs no functions.

Claim Rejections - 35 USC § 112

4. Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter of undue breadth; *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983). Claim 19 is nonenabling for the scope of the claim because it contains only a single means (framing circuitry) to cover every conceivable structure for achieving the stated result while the specification discloses at most only those known to the inventor.

5. Claims 1-16 and 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 6-7, "a feature relating to one of T1 and E1 transmission protocols" is unclear. Claims 11, 14, and 19-21 have similar problem.

Regarding claim 20, line 1, "At least one" is unclear.

Claim Rejections - 35 USC § 102

6. Claims 1, 2, 5, 8, 9, 11, 14, and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Seazholtz et al. (US 6,246,695).

Regarding claims 1, 2, 5, 11, 14, Seazholtz discloses a system, see Fig. 1, in which HDSL interface 34 (first modem or modulator-demodulator), receiving data stream from LAN interface 33, communicates with HDSL interface 36 (second modem), see col. 10, lines 30-36. It is inherent that such communication is done with HDSL frame format as a signal embodied in a carrier wave (claim 21) because interfaces 34 and 36 are HDSL. T1/E1 bandwidth is used for connectivity (the frame format including at least one field in each data payload block for implementing a feature relating to one of T1 and E1 transmission protocols, employing the at least one field for transmission of selected payload data), see col. 6, lines 38-48.

Regarding claims 8 and 9, Seazholtz discloses a PSTN with HDSL interface 34 at the subscriber premises and HDSL interface 36 at central office 10, see col. 4, lines 37-43.

Claim Rejections - 35 USC § 103

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seazholtz et al.

Regarding claim 20, Seazholtz discloses a system as discussed previously. Seazholtz differs from the claimed invention in that Seazholtz does not explicitly disclose an embodiment in the form of a computer readable medium having computer program instructions. However, implementing a system in the form of software (ie. computer program instructions stored on computer readable medium) is known in the art because software can be easier and cheaper to modify and upgrade. Therefore, to one skilled in the art, it would have been obvious to implement the Seazholtz system as software to benefit from reduced complexity and cost of upgrading and modification.

Response to Arguments

8. Applicant's arguments filed January 15, 2002 have been fully considered but they are not persuasive.

Regarding claims 21 and 22, Applicant argued that the claimed HDSL frame is statutory because it "belongs to a class of statutory subject matter", and "the necessary interrelationships between the [frame] and the [carrier wave] are explicitly identified", see Remarks, p. 2, last paragraph, to p. 3, third paragraph. In response, the claimed data frame is non-statutory because it performs no functions. The Federal Circuit has in recent decisions applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test

requires that a "useful, concrete, and tangible result" be accomplished. See *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1359-60, 50 USPQ2d 1447, 1452-53 (Fed. Cir. 1999); *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1600 (Fed. Cir. 1998). The claimed data frame, even when embodied in a carrier wave, is not considered useful because said frame still performs no functions. The claimed data frame could be applied in a useful way, but nothing in claim 21 requires such use (ie. no physical act or step is performed). The phrase "... for implementing a feature relating to one of T1 and E1 on a single-line digital subscriber line (SDSL)" only specifies the field of use.

Regarding claim 19, Applicant replaced "means" with "framing circuitry" to overcome the rejection of a single-means claim. In response, deleting the term "means" does not change the fact that the claimed apparatus still comprises only a single means (ie. framing circuitry). If a claim has only one component or entity performing the functions of the claim, such claim is still a single-means claim even if the term "means" is not explicitly stated.

Regarding claims 1-16 and 19-22, Applicant has not responded to the 35 USC 112, second paragraph rejection on p. 3, paragraphs 7 and 8 of the Office Action mailed November 2, 2001 (previous Office action).

Regarding claim 1, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "having an intended purpose for another purpose", see Remarks, p. 4, third complete paragraph) are not recited in the rejected claim(s). Although the

claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant also argued that, in Seazholtz, "there is no discussion of any of the fields in the HDSL frame format, much less the use of any of the fields in the manner recited in claim 1", see Remarks, p. 4, fourth complete paragraph. In response, HDSL frame format is inherent in the communication between interfaces 34 and 36 of Fig. 1 of Seazholtz because those interfaces are HDSL interfaces. Furthermore, Seazholtz discloses that, "The HDSL interface may contain multiple fractional T1 interfaces ... which utilize different portions of the T1/E1 bandwidth may also be used to provide connectivity with the central office", see col. 6, lines 38-48. For these reasons, as stated in the previous Office action, "T1/E1 bandwidth is used for connectivity" reads on "the frame format including at least one field in each data payload block for implementing a feature relating to one of T1 and E1 transmission protocols, employing the at least one field for transmission of selected payload data".

Allowable Subject Matter

9. Claims 3, 4, 6, 7, 10, 12, 13, 15, and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Trinh whose telephone number is 703-306-5620. The examiner can normally be reached on Monday-Friday, 8am-3pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at 703-305-4700.

D. Trinh *DT*
March 25, 2002



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600